

The Office Action

Claims 1-3 stand rejected under 35 U.S.C. § 102(b) as anticipated by Peiker (EP 0019838).

Claims 4-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Peiker.

Claims 11 and 12 stand rejected under 35 U.S.C. § 112, first paragraph.

The Peiker patent (EP 0019838)

The Peiker patent (EP 0019838) discloses a pickup/speaker assembly (6) for use in a protective helmet (2). The assembly is "carried by a fastening device (3) which is to be releasably connected to the edge of the helmet and which has a retaining element (36;41;51;56) which is to be firmly held by a friction fit against the outside of the edge zone of the helmet." (Peiker, col 9 lines 32-37). The design requires an exposed edge (1) of the helmet to which the fastening device (3) clamps (col 9 lines 37-49). The pickup/speaker assembly is arranged below the clamping device (col 49-55), and thus below the exposed edge (1) of the helmet.

It should be noted that the Peiker communication device requires the pickup/speaker to be arranged below an exposed edge of the helmet. The design would be ineffective with protective headgear which extends substantially below the ear zone because the speaker would be positioned too low, e.g. near the chin area. This design also fails to use the helmet to protect the pickup/speaker assembly.

The amended claims patentably distinguish over Peiker

Amended claim 1 calls for a case disposed on the inside of said headgear in one of the zones occupied by the ear of the user and containing the acoustic pickup and the speaker. This positioning of the speaker/pickup is very different from the positioning of the speaker/pickup of Peiker. In Peiker, the speaker/pickup is required to

be below an edge of the helmet, i.e. outside of the helmet.

Placing the pickup/speaker inside the helmet has significant advantages. It makes the speaker easier to hear. It also places the pickup close to the jaw area where it is highly functionally effective, thus eliminating the need for an unwieldy sound conductor (7) and speech receiver opening (9) as taught by Peiker (FIGURES 1 and 2, col 9 lines 30-32).

Having lateral sidewalls which extend over the ear zones and which cover the speaker/pickup have significant advantages over the more limited lateral sidewalls with the downward dependent speaker/pickup of Peiker. Covering the pickup/speaker with extended helmet sidewalls is safer for both the wearer and the device versus the exposed Peiker design. The pickup/speaker of Peiker can be damaged or can cause injury to the wearer when impacted.

Because these features are not shown in Peiker and because Peiker does not achieve these advantages, it is submitted that claim 1 and claims 2, 5, and 6 which depend therefrom distinguish patentably and unobviously over the references of record.

Claim 2 calls for an extension that defines a connection tab (5) which is engaged in a lateral guide (53) of complementary shape in said protective headgear. This feature is shown most clearly in FIGURES 1 and 6. It is this mounting means which effectuates the mounting of the speaker/pickup inside the helmet and thereby enables extended lateral sidewalls, and it is quite clearly different from the clamp mount of Peiker. Accordingly, it is submitted that claim 2 distinguishes over Peiker.

Amended claim 7 calls for an external principle shell which is shaped to conform with a user's head and having portions which define ear zones that cover ears of an associated user. Claim 7 also calls for placing the case containing the speaker and the pickup inside of the

headgear within one of the ear zones. This placement is different from the arrangement of Peiker which places pickup/speaker below an exposed edge of the helmet. The arrangement of Peiker is incompatible with a shell having portions which define ear zones that cover and protect the ears of a user. Combining the invention of Peiker with such ear zone portions would place the speaker well below the ear and greatly reduce audibility of the speaker. The ear zone portions act to protect the user's ears and to protect the pickup/speaker.

Because claim 7 calls for features which are incompatible with Peiker, and because the function of these features is not achieved by Peiker, it is submitted that claim 7 along with claims 8-10 which depend therefrom distinguish patentably and unobviously over the cited prior art.

Amended claim 8 calls for a connection cable retained at the headgear in its center portion by an attachment device. The Examiner takes Official Notice that providing an attachment device for hanging the cable in the headgear is known in the art. Applicants are not familiar with such a prior art teaching, and, if this rejection is maintained, respectfully request that the Examiner provide an appropriate reference showing this feature.

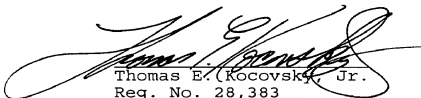
Claim 11 stands rejected only under 35 U.S.C. § 112. The transmitter/receiver assembly finds antecedent basis in item 10 of FIGURE 1 and the last paragraph of page 3 of the specification. With the deletion of the limitation "RF", it is submitted that claim 11 is now fully supported by the specification. There being no other outstanding rejection, it is submitted that claims 11 and 12 are now in condition for allowance.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that claims 1, 2, and 5-12 distinguish patentably and unobviously over the cited prior art. An early allowance of all claims is earnestly solicited.

Respectfully submitted,

FAY, SHARPE, FAGAN,
MINNICH, & MCKEE, LLP



Thomas E. Rucovsky, Jr.
Reg. No. 28,383
1100 Superior Avenue
Seventh Floor
Cleveland, Ohio 44114-2518
(216) 861-5582

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I hereby certify that this Amendment are being deposited with the United States Postal Service as First Class Mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231, on April 23, 2001.

Therese McNulty

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